

U.S. Department of the Interior  
Bureau of Land Management  
White River Field Office  
73544 Hwy 64  
Meeker, CO 81641

## ENVIRONMENTAL ASSESSMENT

**NUMBER:** CO-110-2005-172-EA

**CASEFILE/PROJECT NUMBER** (optional): COC67991

**PROJECT NAME:** Pipeline Hook-ups for William's Wells

**LEGAL DESCRIPTION:** Sixth Principal Meridian, Colorado

T. 1 S., R. 98 W.,  
Sec. 19, SW $\frac{1}{4}$ SE $\frac{1}{4}$ ;  
Sec. 29, S $\frac{1}{2}$ SW $\frac{1}{4}$ ;  
Sec. 30, E $\frac{1}{2}$ NE $\frac{1}{4}$ , NW $\frac{1}{4}$ NE $\frac{1}{4}$ ;  
Sec. 32, NW $\frac{1}{4}$ NE $\frac{1}{4}$ , SE $\frac{1}{4}$ NE $\frac{1}{4}$ ;  
Sec. 33, SW $\frac{1}{4}$ NW $\frac{1}{4}$ , NW $\frac{1}{4}$ SW $\frac{1}{4}$ ;  
Sec. 35, lot 7, 8, 10, 15;  
Sec. 36, lot 12, 13.

T. 2 S., R. 98 W.,  
Sec. 1, lot 24, 26, 30-32, 35;  
Sec. 2, lot 22, 27;  
Sec. 6, lot, 2;  
Sec. 9, SW $\frac{1}{4}$ SE $\frac{1}{4}$ ;  
Sec. 12, lot 12;  
Sec. 15, NE $\frac{1}{4}$ SE $\frac{1}{4}$ , W $\frac{1}{2}$ SE $\frac{1}{4}$   
Sec. 17, SW $\frac{1}{4}$ NE $\frac{1}{4}$ , N $\frac{1}{2}$ SE $\frac{1}{4}$ ;  
Sec. 20, lot 2, 7, W $\frac{1}{2}$ NE $\frac{1}{4}$ ;  
Sec. 21, E $\frac{1}{2}$ NE $\frac{1}{4}$ , SW $\frac{1}{4}$ NE $\frac{1}{4}$ , NE $\frac{1}{4}$ SW $\frac{1}{4}$ , S $\frac{1}{2}$ SW $\frac{1}{4}$ , NW $\frac{1}{4}$ SE $\frac{1}{4}$ ;  
Sec. 22, NW $\frac{1}{4}$ NE $\frac{1}{4}$ , N $\frac{1}{2}$ NW $\frac{1}{4}$ ;  
Sec. 28, lot 6-8, NE $\frac{1}{4}$ SE $\frac{1}{4}$ ;  
Sec. 33, S $\frac{1}{2}$ NE $\frac{1}{4}$ , E $\frac{1}{2}$ SW $\frac{1}{4}$ , NW $\frac{1}{4}$ SE $\frac{1}{4}$ .

T. 3 S., R. 98 W.,  
Sec. 4, lot 3, 4, SW $\frac{1}{4}$ NW $\frac{1}{4}$ ;  
Sec. 5, E $\frac{1}{2}$ SE $\frac{1}{4}$ ;  
Sec. 8, E $\frac{1}{2}$ NE $\frac{1}{4}$ .

**APPLICANT:** Bargath Inc.

**ISSUES AND CONCERNS** (optional): Suitable raptor nesting habitat that occurs within the proposed pipeline right-of-ways will be surveyed for nest structures. The BLM will provide a map of potential raptor nesting habitat associated with the proposed pipeline right-of-ways.

**DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:**

***Background information:*** Ryan Gulch Unit wells pads and access roads for RGU 34-19-198, RGU 31-20-298, and RGU 31-2-298 were analyzed in the environmental assessment CO-110-05-155-ea. RGU 22-6-298 was analyzed in CO-110-05-149-ea, RGU 43-15-298 (CO-110-05-103-ea), RGU 32-17-298 (CO-110-05-136-ea), and RGU 31-8-398 (CO-110-05-142-ea) respectively.

The onsite for these pipeline connections was conducted on July 14, 2005. Two BLM representatives and a Bargath Inc representative went on the onsite. The following are notes that were recorded from the site visits:

RGU 34-19-198 the access road and pipeline for this location is flagged along the reclaimed old calamity ridge road that was replaced by County Road 24X; there weren't any visible problems.

RGU 31-2-298 revealed that the route was flagged on the east side of the road. After you leave the spring in the bottom of the draw, we moved the pipeline to the cut side of the road going up the hill to get it out of the fill slope on the east side. After the pipeline tops the hill, it is then moved back to the east side of the road and stays on the east side up past the pitchers mound. It will cross the water line where it intersects with County Road 83. A Bargath Inc representative accompanied the BLM on the onsite and is aware of the water line.

RGU 22-6-298 it was decided to keep the access route following County road 91 and 24. This route would cause fewer disturbances than going cross country, which involves steep terrain and trees.

RGU 31-2-298 the pipeline will follow the location access road instead of taking off cross country.

RGU 31-8-398 followed County Road 85 through a steep, narrow V-shaped drainage down to intersect with County Road 26 and because of the difficult terrain, this route was scraped in favor of an existing two-track to the northwest.

**Proposed Action:** The proposed action is for pipeline connections for seven wells in the Ryan Gulch area (RGU 34-19-198, RGU 31-2-298, RGU 31-20-298, RGU 22-6-298, RGU 43-15-298, RGU 32-17-298, and RGU 31-8-398). The size of these connecting pipelines will be a buried steel four inch line and will in most cases follow the access roads into these well locations. These four inch lines will connect into the all ready existing eight inch gathering system that was installed last year. Estimated construction time will be 60-90 days (August 1<sup>st</sup> – November 1<sup>st</sup>), weather permitting.

Right-of-way width applied for is 60-feet for the initial construction phase, with a permanent width of 30-feet once installation and reclamation are completed. Approximately 12.78 miles (67,470 feet) will be over public lands. The total potential disturbance will be about 94 acres

Well Connections:

1. The 4-inch line for RGU 34-19-198 will commence at the well head, move southwest approximately 300 feet to follow the reclaimed Calamity Ridge road on to County Road 24 in a southeasterly direction, boring under County Road 91 and continuing southerly along the north side of County Road 24 to tie into the existing 8-inch pipeline in the NWSW of T1S-R98W Sec. 33.
2. The 4-inch line for RGU 31-2-298 will commence at the well head, move northerly along the east side of an existing BLM two-track road, turning easterly along the south side of County Road 83, then southeasterly along the west side of another existing BLM, boring under County Road 24 to tie in to the existing 8-inch pipeline in T2S-R98W Sec. 12
3. The 4-inch line for RGU 22-6-298 will commence at the well head, move northeasterly along the southeast side of County Road 91, turning easterly near the south line of T1S-R98W Sec. 29 to cross and existing road then turning southeasterly along the southwest side of County Road 24 tie into the existing pipeline in the NWSW of T1S-R98W Sec. 33.
4. The 4-inch line for RGU 43-15-298 will commence at the well head, then head southwesterly into Section 22, crossing an existing road, then following the southeasterly side of the road into the NWSW for approximately 2,100 feet where it crosses to the northwesterly side of the road for approximately 900 feet, crossing again and continuing west-southwest for approximately 2,150 feet to the southeast side of the road to follow the road southwesterly to tie into the existing 4-inch line laid along the north side of County Road 85 in the NWNW of T2S-R98W Sec. 28.
5. The 4-inch line for RGU 32-17-298 will commence at the well head, then under County Road 86 to head northeasterly along the southeast side of County Road 86 to tie into the existing 4-inch line in the N2SE of T2S-R98W Sec. 9.
6. The 4-inch line for RGU 31-20-298 will commence at the well head and then head south-southeasterly for approximately 950 feet to tie into the existing 4-inch pipeline in the N2SE of T2S-R98W Sec. 20.
7. The 4-inch line for RGU 31-8-398 will commence at the well head, then head northeasterly along the southeast side of an existing road in Yankee Gulch, turning northwesterly Turning west along County Road 26 for a ¼ mile and boring under County Road 26 to travel north west along an existing BLM two-track road to tie into the existing 4-inch line in the SENW of T2S-R98W Sec. 28.

There are five intermittent and seasonally flowing dry washes to be crossed which will require the pipeline to be buried.

Four (maybe six) bore pits will be required and constructed. Four 100-foot by 100-foot temporary areas will be required to accommodate the bore sites of County Road 24, with an additional two bore sites if County Road 26 is crossed at its paved portion.

**No Action Alternative:** Under the no action alternative, the application would be denied and a different means of transportation for the gas from these wells would have to be found.

**ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD:** RGU 22-6-298 was submitted with two routes—a primary and an alternate route. The primary route would have traveled easterly out of the well head, turning northeasterly across the NWNW of section 5, continuing along the creek bed to the approximate center of T1S, R98W, sec. 32, and then turning easterly to tie into the existing pipeline in the NWSW of T1S, R98W, sec. 33. This alternative was rejected due to the fact that it traverses cross country. The preferred route will follow existing roads.

The proposed route for the pipeline for 31-8-398 followed County Road 85 through a steep, narrow V-shaped drainage down to intersect with County Road 26 and because of the difficult terrain, this route was scraped in favor of an existing two-track to the northwest.

**NEED FOR THE ACTION:** Bargath has submitted an application for a right-of-way for a pipeline gathering system to provide transportation of gas into the Ryan Gulch Compressor Station for processing.

**PLAN CONFORMANCE REVIEW:** The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: Pages 2-49 thru 2-52

Decision Language: “To make public lands available for the siting of public and private facilities through the issuance of applicable land use authorizations, in a manner that provides for reasonable protection of other resource values.”

**AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES /  
MITIGATION MEASURES:**

**STANDARDS FOR PUBLIC LAND HEALTH:** In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover

upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

## **CRITICAL ELEMENTS**

### **AIR QUALITY**

*Affected Environment:* The proposed pipelines are not located within a thirty mile radius of any special designation air sheds or non-attainment areas.

*Environmental Consequences of the Proposed Action:* Temporary reductions in vegetal cover resulting from construction activities will leave soils temporarily exposed to eolian processes. During dry and windy periods, air quality may be compromised due to increased levels of fugitive dust originating from the exposed construction area. Overall, the proposed action by itself should not greatly compromise National Ambient Air Quality Standards (NAAQS) on an hourly or daily basis.

*Environmental Consequences of the No Action Alternative:* None

*Mitigation:* The operator will be responsible for complying with all local, state, and federal air quality regulations as well as providing documentation to the BLM that they have done so. Stockpiled soils associated with pipeline construction will be wetted to mitigate fugitive dust production.

### **CULTURAL RESOURCES**

*Affected Environment:* The proposed 4-inch line for RGU 34-19-198 well and RGU 31-2-298 well have been inventoried at the Class III (100% pedestrian) level (Conner 2005, Conner et al 2005, Conner et al 2005) with no cultural resources identified in the areas inventoried.

The proposed 4-inch line for RGU 43-15-298 and RGU 32-17-298 well have been inventoried at the Class III (100% pedestrian) level (Conner et al 2005, Compliance Dated 8/31/2005, Conner et al 2004, Compliance Dated 12/14/2004) with one site identified in the inventoried area.

The proposed 4-inch line for RGU 22-6-298 follows an existing road down Stakes Springs Draw and has been inventoried at the Class III (100% pedestrian) level (Conner et al 2005) with one old homestead site identified in the inventoried area.

The proposed 4-inch line for RGU 31-20-298 well has been inventoried at the Class III (100% pedestrian) level (Conner 2005, Compliance Dated 7/25/2005, Conner et al 2004, Compliance Dated 9/13/2004, Conner et al 2005, Compliance Dated 8/31/2005). Only one site (5RB 2684)

was recorded along the pipeline routes and appropriate mitigation was identified in the earlier EA (CO-110-04-180) for that segment of the pipeline.

The proposed 4-inch line for RGU 31-8-398 well has been inventoried at the Class III (100% pedestrian) level (Conner et al 2005, Compliance Dated 8/31/2005) with one site (5RB 5023) and two isolated finds in the inventoried area.

*Environmental Consequences of the Proposed Action:* The proposed 4-inch line for RGU 34-19-198 well, RGU 43-15-298 well, RGU 31-20-298 well and RGU 32-17-298 well will not impact any known cultural resources. The proposed 4-inch line for RGU 31-2-298 well will avoid one site completely. However, it is not known if site 5RB 2500 can be avoided by construction. The three isolated finds are not significant and all important scientific data has been recovered at this time

The proposed 4-inch line for RGU 22-6-298 has two alternatives. If the preferred alternative down Rio Blanco County road 91 is followed there would be no new impacts to any known cultural resources.

The proposed 4-inch line for RGU 31-8-398 well has the potential to impact at least one site and two isolated finds. Mitigation measures may prevent impacts to the site while impacts to the isolated finds are not considered significant.

*Environmental Consequences of the No Action Alternative:* There would be no new impacts to cultural resources under the No Action Alternative.

*Mitigation:* 1. For all of the pipelines in the proposed action the following mitigation will apply: The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required

mitigation has been completed, the operator will then be allowed to resume construction.

2. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.
3. In addition the following mitigation will apply to each individual pipeline/well pad:
  - The proposed 4-inch line for RGU 31-2-298 well: The pipeline shall be rerouted to the center line of the access road in the vicinity of 5RB 2500. The site boundaries shall be flagged for avoidance and the trench in the vicinity of the site shall be monitored.
  - For the proposed 4-inch line for RGU 22-6-298, down Rio Blanco County Road 91, the Colorado Division of Wildlife (property owner) has stipulated that the pipeline will be laid north of the county road avoiding site 5RB 646.
  - For the proposed 4-inch line for RGU 43-15-298 well: All pipeline construction activities must remain south of the existing access road in the vicinity of 5RB 2170.
  - For the proposed 4-inch line for RGU 31-20-298 well: Appropriate mitigation was identified in the earlier EA (CO-110-04-180) for that segment of the pipeline in the vicinity of site 5RB 2684.
  - For the proposed 4-inch line for RGU 31-8-398 well: Site 5RB 5023 must be avoided by all construction and maintenance activities related to the well tie.

## INVASIVE, NON-NATIVE SPECIES

*Affected Environment:* Noxious weeds known to occur in the project area include houndstongue (*Cynoglossum officinale*), mullein (*Verbascum thapsus*), and diffuse knapweed (*Centaurea diffusa*). The invasive alien annual cheatgrass occurs throughout the project area in association with unrevegetated earthen disturbance along roads, wells, and pipelines.

*Environmental Consequences of the Proposed Action:* The proposed action will create about 94 acres of new earthen disturbance, which if it is not revegetated with desirable species and /or treated with herbicides to eradicate noxious weeds/ cheatgrass, will be invaded and dominated by noxious weeds/cheatgrass, increasing the potential for fire and the consequent further proliferation of cheatgrass. Of particular concern is the route of the pipeline to 31-2-298 which goes through an established area of diffuse knapweed. Noxious weeds could also spread from the project sites to surrounding native rangelands resulting in a long term negative impact. The resulting proliferation of noxious weeds/cheatgrass will perpetuate a downward cycle of environmental degradation that will be largely irreversible. There would be a low likelihood of long term negative impact if the proposed mitigation is properly implemented.

*Environmental Consequences of the No Action Alternative:* There will be no change from the present situation.

*Mitigation:* The operator will be required to monitor the project area for a minimum of three years post disturbance and eradicate all noxious and invasive species which occur on site using materials and methods approved in advance by the Authorized Officer.

## MIGRATORY BIRDS

*Affected Environment:* The dominant vegetation within the pipeline right-of-way to locations 31-20-298, 31-2-298, and 43-15-298 consists primarily of stunted, open-canopied juniper-dominated woodlands, while dominant vegetation within the pipeline right-of-way to location 34-19-198 consists of Wyoming big sagebrush (*Artemisia tridentata* subsp. *wyomingensis*). There are a number of migratory birds that fulfill nesting functions in these Wyoming big sagebrush and pinyon-juniper types during the months of May, June, and July, including several species identified as having higher conservation interest by the Rocky Mountain Bird Observatory, Partners in Flight program (i.e., Brewer's sparrow, green-tailed towhee, gray flycatcher, pinyon jay, juniper titmouse, black-throated gray warbler, and violet-green swallow). These and more common, generalized species associated with these habitats (e.g., house finch, chipping sparrow, lark sparrow, vesper sparrow, and spotted towhee) are widely represented at appropriate densities in extensive suitable habitats throughout the White River Resource Area.

Dominant vegetation within the pipeline right-of-way to locations 31-8-398, 32-17-298, and 22-6-298 consists primarily of basin big sagebrush (*Artemisia tridentata* subsp. *tridentata*). Herbaceous ground cover within the proposed pipeline right-of-way for locations 31-8-398, 32-17-298, and 22-6-298 consists of western wheatgrass, basin wild rye, Sandberg bluegrass, and squirreltail. Blue-gray gnatcatcher, Brewer's sparrow and Vesper's sparrow are associated with these habitats although these shrublands typically support few nesting birds. There are no species of high conservation interest associated within the proposed pipeline right-of-way.

*Environmental Consequences of the Proposed Action:* Approximately 16 acres of pinyon-juniper woodland habitat will be removed within the proposed pipeline right-of-way to locations 31-20-298, 31-2-298, 43-15-298. Area within the proposed pipeline right-of-way classified as pinyon-juniper may also provide suitable nesting habitat for raptors, and this area will be removed during right-of-way construction activities. In addition, construction during the migratory bird nesting season (May through July period) may be disruptive to breeding migratory birds and nests may be lost. Recent studies suggest that breeding bird nesting density can be reduced as much as 50 percent within 300 feet of existing roads. Typically one pair of high interest bird species occur per acre. Although the proposed actions would represent an incremental and longer term reduction in pinyon/juniper woodland, implementation of the proposed actions would have no measurable influence on the abundance or distribution of breeding migratory birds at any landscape scale.

As staked, the pipeline right-of-way to location 34-19-198 location (a Wyoming big sagebrush site) will follow an existing county road. Recent research indicates that nesting populations of sagebrush obligates, including Brewer's sparrow and the towhee, are reduced by 50% within 300 feet of roads. With an average territory size of approximately 2 acres, and depending on the

timing of this action, it is possible that 1 to 2 nesting attempts/acre of each species could potentially be disrupted. This impact is considered discountable even in the localized context of 84 Mesa (i.e., 1 to 2 effective habitat acres relative to about 4,000 acres).

Dominant vegetation within the pipeline right-of-way to locations 31-8-398, 32-17-298, and 22-6-298 consists primarily of basin big sagebrush (*Artemisia tridentata* subsp. *tridentata*), with low densities of greasewood scattered throughout. It is unlikely that pipeline right-of-way construction to locations 31-8-398, 32-17-298, and 22-6-298 would have any measurable negative impacts on nesting activities of migratory birds within the proposed project area. Moreover, pipeline right-of-ways to locations 31-8-398, 32-17-298 and 22-6-298 will follow existing roads and would occur in areas of degraded migratory breeding bird habitat with low shrub densities

*Environmental Consequences of the No Action Alternative:* There would be no action authorized that would have potential to disrupt the breeding activities of migratory birds or expose birds to fluids that pose a mortality risk.

*Mitigation:* None.

#### **THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES (includes a finding on Standard 4)**

*Affected Environment:* There are no threatened or endangered animals known to inhabit or derive important benefit within the proposed pipeline right-of-way routes to locations 31-20-298, 31-2-298, 43-15-298, 34-19-198, 31-8-398, 32-17-298, or 22-6-298. A small number of northern sage grouse, a BLM sensitive species and recently petitioned for listing, historically occupied 84 Mesa (34-19-198 location), a large low-elevation sagebrush park. As staked, the 34-19-198 location is approximately 0.5 miles from a known lek site; however, no sage grouse are known to have occupied 84 Mesa since about the mid-1980's, but these habitats remain available for natural colonization or species recovery actions. The known lek site mentioned above is currently inactive.

*Environmental Consequences of the Proposed Action:* As originally staked, the 34-19-198 location was situated about 650 feet from the county road. The location was subsequently moved as close as practical and parallel to the county road (approximately 328 feet) to reduce the net involvement of suitable sagebrush habitat (e.g., continuity and extent) and maximize the use of roadside habitats with suboptimal utility. As currently situated, longer term loss of potential sagebrush habitat attributable to pipeline right-of-way construction would be confined to an area that extends approximately 328 feet from the existing county road to location 34-19-198.

*Environmental Consequences of the No Action Alternative:* No immediate action would be authorized that would involve the adverse modification of sagebrush or Pinion-juniper habitat. Alternate pipeline right-of-way locations would most likely be situated at greater distances from the county road, resulting in more extensive access needs and an increase in direct and indirect loss of sagebrush and decrease in overall habitat utility.

*Mitigation:* None

*Finding on the Public Land Health Standard for Threatened & Endangered species:* The proposed action would have no measurable influence on populations or habitat associated with special status species.

**THREATENED, ENDANGERED, AND SENSITIVE PLANT SPECIES** (includes a finding on Standard 4)

*Affected Environment:* An on-the-ground inventory was conducted by BLM staff of shale outcrops occurring on some slopes in the area of T2S R98W, sec. 28 NWSE (RGU 31-8-398 pipeline). Outcroppings on both sides were inventoried also for the presence of threatened, endangered and BLM sensitive plants. No plants were located. The remainder of the routes did not encounter any other potential habitat or plants.

*Environmental Consequences of the Proposed Action:* The shale outcroppings could be potential habitat in the future if a seed source were to come into the area

*Environmental Consequences of the No Action Alternative:* None

*Mitigation:* If the RGU 31-8-398 pipeline is buried at T2S, R98W, sec. 28 NWSE where the pipeline comes down near the toe of slope, the topsoil containing the light colored shale outcropping should be set aside and then replaced in the same place when the groundwork is completed.

*Finding on the Public Land Health Standard for Threatened & Endangered species:* There is no reasonable likelihood that the proposed action or no action alternative would have an influence on the condition or function of Threatened, Endangered, or Sensitive plant species. Thus there would be no effect on achieving the land health standard.

**WASTES, HAZARDOUS OR SOLID**

*Affected Environment:* There are no known hazardous or other solid wastes on the subject lands. No hazardous materials are known to have been used, stored or disposed of at sites included in the project area.

*Environmental Consequences of the Proposed Action:* No listed or extremely hazardous materials in excess of threshold quantities are proposed for use in this project. While commercial preparations of fuels and lubricants proposed for use may contain some hazardous constituents, they would be stored, used and transported in a manner consistent with applicable laws, and the generation of hazardous wastes would not be anticipated. Solid wastes would be properly disposed of.

*Environmental Consequences of the No Action Alternative:* No hazardous or other solid wastes would be generated under the no-action alternative.

*Mitigation:* The applicant shall be required to collect and properly dispose of any solid wastes generated by the proposed actions.

## **WATER QUALITY, SURFACE AND GROUND** (includes a finding on Standard 5)

*Affected Environment:* Surface Water: The proposed actions are located within the Yellow Creek, Corral Gulch, Stake Springs, Ryan Gulch, and Black Sulfur Creek catchment areas. Yellow Creek, Corral Gulch, and Stake Springs are situated in stream segment 13b of the White River Basin. Ryan Gulch is located within stream segment 16 while Black Sulfur Creek can be found in segment 20 of the White River Basin. A review of the Colorado's 1989 Nonpoint Source Assessment Report (plus updates), the 305(b) report, the 303(d) list, the White River ROD/RMP, and the Unified Watershed Assessment was done to see if any water quality concerns have been identified. It should be noted that the White River from Piceance Creek to Douglas Creek has been listed on the states monitoring and evaluation list (M&E list) as being sediment impaired. In addition, the White River ROD/RMP has identified the main stem of Yellow Creek as a perennial stream NOT meeting water quality standards for suspended sediment and salinity.

The State has classified stream segments 13b and 16 as "Use Protected". Stream segments 13b and 16 have been further designated by the state as being beneficial for the following uses: Warm Aquatic Life 2, Recreation 2, and Agriculture.

The antidegradation review requirements in the Antidegradation Rule are not applicable to waters designated use-protected. For those waters, only the protection specified in each reach will apply. For stream segments 13b and 16, minimum standards for four parameters have been listed. These parameters are: dissolved oxygen = 5.0 mg/l, pH = 6.5 - 9.0, Fecal Coliform = 2000/100 ml, and 630/100 ml E. coli.

Stream segment 20 is not classified as "Use Protected" thus the Antidegradation review requirements in the Antidegradation Rule are applicable to this segment. Segment 20 has been designated as beneficial for the following uses: Cold Aquatic Life 2, Recreation 1b, and Agriculture. Minimum standards for contaminants are as follows: dissolved oxygen = 6.0 mg/l, pH = 6.5 - 9.0, Fecal Coliform = 2000/100 ml, and 630/100 ml E. coli.

Ground Water: A review of the US Geological Survey (USGS) Ground Water Atlas of the United States (HA 730-C) was done to assess ground water resources at the location of the proposed action. The shallowest aquifer underlying the proposed action is the Uinta-Animas aquifer. The Uinta-Animas aquifer at this location consists of the Uinta Formation and the Parachute Creek member of the Green River Formation.

*Environmental Consequences of the Proposed Action:* Construction of pipelines will result in temporary exposure of soils to erosional processes. Heavy equipment used during

construction combined with the removal of ground cover will increase erosive potential due to runoff (overland flows) and raindrop impact during storm events. Increased erosion will adversely impact water quality and stream channel/bank stability in downstream reaches.

Local ground water may be contaminated if a leaks or spills associated with construction operations are allowed to infiltrate soils. Contaminants impacting local ground water will also adversely impact surface waters as contaminated local ground water recharges the affected stream segments. Adverse impacts on deeper ground water are not anticipated.

*Environmental Consequences of the No Action Alternative:* None

*Mitigation:* No operations using chemical processes or other pollutants in their activities will be allowed to occur within 200 feet of any water bodies. The operator will be responsible for complying with all local, state, and federal water quality regulations.

All surface disturbing activities must strictly adhere to “Gold Book” surface operating standards for oil and gas exploration and development. This book is available at the WRFO upon request.

Portions of the proposed pipelines which will cross drainages shall be designed so they will not cause siltation or the accumulation of debris in the drainage crossing.

Complete reclamation will follow pipeline construction. Pipelines will be recontoured, 100% of disturbed surfaces will be revegetated with Native Seed Mix #3, flow deflectors and sediment traps (woody debris) will be evenly redistributed over all disturbed seeded areas.

*Finding on the Public Land Health Standard for water quality:* Stream segments 16 and 19 of the White River Basin currently meet the water quality standards set by the state. Following proper mitigation measures, water quality in these stream segments will be unaffected.

Yellow Creek has been identified as a perennial stream NOT meeting water quality standards set by the state. However, with proper mitigation water quality in Yellow Creek will not be deteriorated as a result of the proposed actions.

## **WETLANDS AND RIPARIAN ZONES (includes a finding on Standard 2)**

*Affected Environment:* The area adjacent to the proposed project area does not support riparian or wetland communities. Furthermore, riparian or wetland communities will not be directly involved or potentially affected by the proposed action.

*Environmental Consequences of the Proposed Action:* The proposed action would have no conceivable influence on riparian or wetland communities.

*Environmental Consequences of the No Action Alternative:* The no-action alternative would not have any conceivable influence on riparian or wetland communities.

*Mitigation:* None.

*Finding on the Public Land Health Standard for riparian systems:* This project would have no conceivable potential for influencing riparian attributes addressed in the Standards.

#### **CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:**

No ACEC's, Wilderness, flood plains, prime and unique farmlands, or Wild and Scenic Rivers exist within the area affected by the proposed action. There are also no Native American religious or environmental justice concerns associated with the proposed action.

#### **NON-CRITICAL ELEMENTS**

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

#### **SOILS** (includes a finding on Standard 1)

*Affected Environment:* The following data is a product of an order III soil survey conducted by the Natural Resource Conservation Service (NRCS). The accompanying table highlights important soil characteristics. A complete summary of this information can be found at the White River Field Office.

Soil Number	Soil Name	Slope	Ecological site	Salinity	Run Off	Erosion Potential	Bedrock
6	Barcus channery loamy sand	2-8%	Foothills Swale	<2	Slow	Moderate	>60
33	Forelle loam	3-8%	Rolling Loam	<2	Medium	Moderate	>60
36	Glendive fine sandy loam		Foothills Swale	2-4	Slow	Slight	>60
40	Hagga loam		Swale Meadow	2-8	Slow	Slight	>60
41	Havre loam	0-4%	Foothill Swale	<4	Medium	Slight	>60
64	Piceance fine sandy loam	5-15%	Rolling Loam	<2	Medium	Moderate to high	20-40
70	Redcreek-Rentsac complex	5-30%	PJ woodlands /PJ woodlands	<2	Very high	Moderate to high	10-20
73	Rentsac channery loam	5-50%	Pinyon-Juniper woodlands	<2	Rapid	Moderate to very high	10-20
75	Rentsac-Piceance complex	2-30%	PJ woodland /Rolling Loam	<2	Medium	Moderate to high	10-20
91	Torriorthents-Rock Outcrop complex	15-90%	Stoney Foothills		Rapid	Very high	10-20
104	Yamac Loam	2-15%	Rolling Loam	<2	Medium	Slight to moderate	>60

CSU-1 “fragile soils” will be crossed for approximately 0.05 miles of alternate pipeline route 14 (Black Sulfur Cr.).

*Environmental Consequences of the Proposed Action:* Construction of the pipelines will result in losses in vegetation and ground cover. Improper drainage relief structures along the pipeline could increase potential for overland flows and accelerate erosional processes. Heavy equipment used in pipeline construction could elevate soil compaction decreasing infiltration rates and increase potential for erosive overland flows. As analyzed in the White River RMP, fragile soils on areas with slopes >30% are more susceptible to erosion, mass wasting and retarded revegetation efforts compounding these impacts. In addition, most of the encountered soils are calcareous in nature. If drainage relief structures are not properly constructed and maintained, piping and/or mass wasting may occur due to the dissolution of calcium carbonate.

*Environmental Consequences of the No Action Alternative:* None

*Mitigation:* On the pipeline route identified above, fragile soils encountered will have the controlled surface use stipulations (CSU) applied. This stipulation is as follows: Surface disturbing activities will be allowed in these areas only after an engineered construction/reclamation plan is submitted by the operator and approved by the Area Manager. The following items must be addressed in the plan: 1) How soil productivity will be restored; 2) How surface runoff will be treated to avoid accelerated erosion such as riling, gullyng, piping, and mass wasting. This stipulation would be waived if the operator were to do a surface line.

*Finding on the Public Land Health Standard for upland soils:* At the present time, soils in the vicinity of the proposed actions exhibit infiltration and permeability rates that are appropriate to soil type, landform, climate, and geologic processes. The proposed actions will cause decreases in both infiltration and permeability rates due to soil compaction and loss of vegetal cover. However, following proper mitigation soil health will not be changed from current conditions.

## **VEGETATION (includes a finding on Standard 3)**

*Affected Environment:* The pipelines would cross several different vegetation associations. The three spur lines to wells 31-20-298, 43-15-298, 34-19-198 and 31-2-298 all cross a mixture of pinyon/juniper woodlands and Wyoming sagebrush parks. The lines for 22-6-298 and 31-8-298 occur primarily in basin big sagebrush and burned and seeded basin big sagebrush.

*Environmental Consequences of the Proposed Action:* Two primary negative impacts will/could occur as a result of pipeline construction; 1) The 12.78 miles of pipeline construction will accelerate the rate of plant community fragmentation which is presently occurring in this area of Piceance Basin. 2) In terms of plant community composition, structure and function, the principal negative impact over the long term would occur if cheatgrass or noxious weeds are

allowed to establish and proliferate on the disturbed areas resulting from pipeline and access road construction.

*Environmental Consequences of the No Action Alternative:* There will be no change from the present situation.

*Mitigation:* Promptly revegetate all disturbed areas not necessary for production with Native Seed mix #3. Revegetation will commence immediately after construction and will not be delayed until the following fall. Debris will not be scattered on the pipeline until after seeding operations are completed. Seed mixture rates are Pure Live Seed (PLS) pounds per acre. Drill seeding is the preferred method of application.

Native Seed mix #3			
3	Western wheatgrass (Rosanna)	2	Gravelly 10"-14", Pinyon/Juniper Woodland, Stony Foothills, 147 (Mountain Mahogany)
	Bluebunch wheatgrass (Whitmar)	2	
	Needle and thread	1	
	Indian ricegrass (Rimrock)	2	
	Fourwing saltbush (Wytana)	1	
	Utah sweetvetch	1	

If construction/development occurs between April 15 and November 15, the operator will be required to water surface access roads to reduce airborne dust and damage to roadside vegetation communities

*Finding on the Public Land Health Standard for plant and animal communities* (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): Vegetation in the project area currently meets the Standard on a watershed and landscape basis and is expected to continue to meet the Standard in the future following implementation of the proposed action.

## **WILDLIFE, AQUATIC** (includes a finding on Standard 3)

*Affected Environment:* There are no aquatic habitats directly involved or potentially affected by the proposed action.

*Environmental Consequences of the Proposed Action:* The proposed action would have no conceivable influence on aquatic wildlife or habitats.

*Environmental Consequences of the No Action Alternative:* The no-action alternative would not have any conceivable influence on aquatic wildlife or habitats.

*Mitigation:* None

*Finding on the Public Land Health Standard for plant and animal communities* (partial, see also Vegetation and Wildlife, Terrestrial): This project would have no conceivable potential for influencing aquatic wildlife or habitats addressed in the Standards.

## **WILDLIFE, TERRESTRIAL** (includes a finding on Standard 3)

*Affected Environment:* Dominant vegetation within the pipeline right-of-way to locations 31-20-298, 31-2-298, and 43-15-298 consists primarily of stunted, open-canopied juniper-dominated woodlands, while dominant vegetation within the pipeline right-of-way to location 34-19-198 consists of Wyoming big sagebrush (*Artemisia tridentata* subsp. *wyomingensis*).

The Pinyon-juniper/mixed-shrub habitats that occur within the proposed pipeline right-of-way for location 31-2-298 are used by big game as severe winter range. These areas generally sustain approximately 90% of the Piceance deer population during extreme winter conditions.

Nongame bird abundance and composition within the proposed pipeline right-of-ways for locations 31-20-298, 31-2-298, 34-19-198 and 43-15-298 are considered representative and complete with no obvious deficiencies in composition. Small mammal populations and distribution are poorly documented; however, the species potentially occurring on these sites are widely distributed throughout the State and the Great Basin. All of these upland species display broad ecological tolerance and are documented from habitats ranging from foothill to alpine sites. No narrowly distributed or highly specialized species or sub-specific populations are known to occur in the Piceance Basin.

Dominant vegetation within the pipeline right-of-way to locations 31-8-398, 32-17-298, and 22-6-298 consists primarily of basin big sagebrush (*Artemisia tridentata* subsp. *tridentata*). The proposed pipeline right-of-ways to locations 31-8-398, 32-17-298, and 22-6-298 include mule deer severe winter range, which is typically used heavily by deer during the late winter months. One of the most important functions of these ranges is fulfilled during the early spring periods (late March through early May) when big game is most vulnerable to the influences of poor nutrition and extraneous energy demands (e.g., winter season recovery, last stages of gestation).

*Environmental Consequences of the Proposed Action:* The behavioral effects of oil and gas activity on deer during the late winter and early spring period (i.e., avoidance and disuse of available forage, elevated energetic drain) would be most pronounced on severe winter range. It is recommended that, regardless of prevailing winter weather conditions, construction of the pipeline right-of-way for locations 31-2-298, and 31-20-298 be scheduled to avoid the period between January 1 and April 15. The proposed pipeline right-of-way for location 43-15-298 does not include deer or elk critical habitat.

Nongame bird abundance and composition associated within the proposed pipeline right-of-way for locations 31-20-298, 31-2-298, and 43-15-298 is considered representative and complete with no obvious deficiencies in composition. Small mammal population distribution is poorly documented; however, the species potentially occurring on these sites are widely distributed throughout the State and the Great Basin. All of these upland species display broad ecological tolerance and are documented from habitats ranging from foothill to alpine sites. No narrowly distributed or highly specialized species or sub-specific populations are known to occur in the Piceance Basin.

Pipeline right-of-way construction to locations 31-20-298, 43-15-298 and 31-2-298 will remove approximately 16 acres of potential raptor nesting habitat. The operator will be responsible for conducting raptor surveys in those areas identified as potential raptor nesting habitat. If active nests are found in close proximity to the proposed pipeline right-of-way, then these sections of pipeline would be subject to the RMP-approved timing limitation stipulation TL-04, which disallows disruptive activity within ¼ mile of raptor nests from February 1 through August 15 or until fledging and dispersal of young. This stipulation can be modified based on site-specific information that indicates the nest would remain unattended by May 15 of the project year.

The proposed pipeline right-of-ways for locations 31-8-398, 32-17-298, and 22-6-298 will involve the disturbance and/or removal of basin big sagebrush and greasewood, species which do not constitute prime forage for big game. Reclamation of these sites would likely provide herbaceous ground cover which would be particularly beneficial to big game during the spring months.

The prevailing 2004/2005 winter weather conditions have been marked by unseasonably mild temperatures, including diminished snow pack and early emergence of herbaceous forage. Deer appear to be in remarkably good condition for this time of year. It is recommended that no condition of approval be applied to this action as these conditions meet the exception criteria for the WRFO severe winter range timing limitation stipulation. By implementing reclamation measures recommended in the mitigation section, short and long term habitat integrity, particularly for big game, would remain essentially unaffected.

*Environmental Consequences of the No Action Alternative:* Failing to construct the pipeline right-of-way would maintain the current condition and functional qualities of the project area.

*Mitigation:* 1. It is recommended that, regardless of prevailing winter weather conditions, construction of the pipeline right-of-way for locations 31-2-298 and 31-20-298 be scheduled to avoid the period between January 1 and April 15.

2. Suitable raptor nesting habitat that occurs within the proposed pipeline right-of-ways will be surveyed for nest structures. The BLM will provide a map of potential raptor nesting habitat associated with the proposed pipeline right-of-ways. All suitable raptor nesting habitat associated with the proposed pipeline right-of-ways will be surveyed using established inventory methods. A written report of findings will be submitted to the BLM WRFO seven days prior to the anticipated start date of surface disturbance activities.

3. If active nests are found in close proximity to the proposed pipeline right-of-way, then these sections of pipeline would be subject to the RMP-approved timing limitation stipulation TL-04, which disallows disruptive activity within ¼ mile of raptor nests from February 1 through August 15 or until fledging and dispersal of young. This stipulation can be modified based on site-specific information that indicates the nest would remain unattended by May 15 of the project year.

*Finding on the Public Land Health Standard for plant and animal communities* (partial, see also Vegetation and Wildlife, Aquatic): This project should have no conceivable influence on the condition or function of terrestrial habitats or wildlife associated with these habitats, and therefore, would have no influence on continued maintenance of associated land health standards.

**OTHER NON-CRITICAL ELEMENTS:** For the following elements, only those brought forward for analysis will be addressed further.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Access and Transportation			X
Cadastral Survey	X		
Fire Management			X
Forest Management		X	
Geology and Minerals	X		
Hydrology/Water Rights		X	
Law Enforcement		X	
Noise		X	
Paleontology			X
Rangeland Management			X
Realty Authorizations		X	
Recreation			X
Socio-Economics		X	
Visual Resources			X
Wild Horses			X

## ACCESS AND TRANSPORTATION

*Affected Environment:* The proposed action will affect Rio Blanco County roads 91, 24, 83 and 85. In addition, BLM roads 1019 and 1148 will be affected as well as unnumbered unnamed well access routes.

*Environmental Consequences of the Proposed Action:* No new routes will be created by this action as they generally follow existing routes.

*Environmental Consequences of the No Action Alternative:* None.

*Mitigation:* None.

## FIRE MANAGEMENT

*Affected Environment:* The pipelines would cross several different vegetation associations. The four spur lines to wells 31-20-298, 31-8-398, 43-15-298, and 31-2-298 all cross a mixture of pinyon/juniper woodlands and Wyoming sagebrush parks.

The proposed 31-20-298 pipeline involves approximately 0.5 miles of pipeline construction for an approximate total of 3.6 acres of disturbance in (heavy 10 tons/acre) PJ fuel type north of county road 85.

The proposed 31-8-398 pipeline involves approximately 1.0 miles of pipeline construction for an approximate total of 7.3 acres of disturbance in sparse (2-5 tons/acre) PJ fuel type north of county road 26.

The proposed 43-15-298 pipeline involves approximately 1.1 miles of pipeline construction for an approximate total of 11 acres of disturbance in (moderate 5-9 tons/acre) PJ fuel type in numerous stands along the access route.

The proposed 31-2-298 pipeline involves approximately 0.16 miles of pipeline construction from the location to RBC 83 and 0.9 miles from the draw bottom in Ryan Gulch up to the mesa top for an approximate total of 7.7 acres of disturbance in (moderate 5-9 tons/acre) PJ fuel type in numerous stands along the access route.

Due to the existing tree cover of pinion and juniper, there will be a need for the operator to clear these trees. If not adequately treated, these trees will result in elevated hazardous fuels conditions and remain on-site for many years. These accumulations of dead material are very receptive to fire bands and spotting from wind driven fires and can greatly accelerate the rate of spread of the fire front. The road(s) associated with this project may be used by the general public for a variety of uses, including access for firewood gathering, hunting and other dispersed recreational activities. Increased public use of an area will nearly always result in an increased potential for man-caused wildland fires.

The National Fire Plan calls for “firefighter and public safety” to be the highest priority for all fire management activities. In the pinion, juniper, and brush types common on the White River Resource Area, roads and other man-made openings are commonly used as fuel breaks or barriers to control the spread of both wildland and prescribed fires. By reducing the activity fuels created from this proposal, future fire management efforts in this area should be safer for those involved and more effective.

*Environmental Consequences of the Proposed Action:* There will be approximately 30 acres of pipeline construction requiring the removal of pinion/juniper fuel type for the spur lines to wells 31-20-298, 31-8-398, 43-15-298, and 31-2-298. If not treated the slash and woody debris will create an elevated hazardous dead fuel loading which could pose significant control problems in the event of a wildfire. Additionally there would be greater threat to public, industry personnel, and fire suppression personnel. The other locations proposed by this action are not located in or go through significant pinion/juniper and therefore will not create the dead fuel accumulation anticipated by the above mentioned lines.

*Environmental Consequences of the No Action Alternative:* There would be no tree removal or disturbance which would cause significant dead fuel loading.

*Mitigation:* Several options may be considered for treatment of slash from this project. A hydro-ax or other mulching type machine could be used to remove the trees. The machines are capable of shredding trees up to 12" in diameter and 15' tall as well as mowing brush like a conventional brush beater. It generally leaves small branches and pieces of wood from pencil size up to bowling ball size. The mulch is evenly scattered across the surface and the tires or tracks distribute the weight of the equipment; this would effectively breakdown the woody fuel and scatter the debris thereby eliminating any hazardous fuel load along the road and pipeline right-of-way. The other option would be to cut trees and have them chipped and scattered on the right-of-way after seeding of the disturbed areas.

## **FOREST MANAGEMENT**

*Affected Environment:* Several of the proposed pipelines are within commercial pinyon/juniper woodlands as identified in the White River Land Use Plan. These woodlands were identified as provoking commercial quantities of woodland products, in this case firewood and fence posts. The Land Use Plan identified a limit of 25 acres per year of clear cutting and 75 acres per year of selective cutting within the Piceance Basin. These woodlands are valuable to the local publics providing firewood, fence posts and Christmas trees.

*Environmental Consequences of the Proposed Action:* The proposed project is expected to remove 17 acres of commercial pinyon/juniper woodlands associated with the 31-2-298, 22-6-298B and 31-20-298 wells. With the mitigation proposed in fire management the threat of insects and disease would be decreased.

*Environmental Consequences of the No Action Alternative:* There would be no impacts.

*Mitigation:* As stated in the Fire Management section.

## **PALEONTOLOGY**

*Affected Environment:* The proposed 4-inch line for RGU 34-19-198 well: The majority of the pipeline route lies in an area mapped as the Uinta Formation, except where it crosses Yellow Creek – which is Quaternary alluviums (Tweto 1979). The BLM has classified the Uinta Formation as a Condition I formation meaning it is known to produce scientifically important fossil resources.

The proposed 4-inch line for RGU 31-2-298 well, RGU 43-15-298 well, RGU 22-6-298 alternative route and RGU 31-20-298 well: The proposed pipeline route is located in an area generally mapped as the Uinta Formation (Tweto 1979) which the BLM has classified as a Condition I formation meaning it is known to produce scientifically important fossil resources.

The proposed 4-inch line for RGU 22-6-298, preferred alternative: The preferred alternative is located in an area that is likely alluviums and Quaternary Alluviums (Tweto 1979) which overlie the Uinta Formation.

The proposed 4-inch line for RGU 32-17-298 well: The proposed pipeline route appears to lie in an area that is in the alluvial bottoms of Ryan Gulch where the Uinta Formation is overlain by Quaternary Alluviums however the depth of the alluvial fill is unknown and it may be shallow enough to expose the Condition I Uinta Formation during pipeline excavation.

The proposed 4-inch line for RGU 31-8-398 well: The proposed pipeline route appears to run along the bottom of Yankee Gulch, which is likely to be modern alluviums overlying the Uinta Formation until it ascends the ridge north of Back Sulphur Creek in Section 28, T 2 S, R 98 W. At the point the pipeline begins to ascend the ridge the route is in an area mapped as the Uinta Formation (Tweto 1979) which the BLM has classified as a Condition I formation, meaning it is known to produce scientifically important fossil resources.

*Environmental Consequences of the Proposed Action:* The proposed 4-inch line for RGU 34-19-198 well, RGU 31-2-298 well, RGU 22-6-298 well alternative, RGU 43-15-298 well and RGU 31-20-298 well has the potential to impact scientifically important fossils any time it becomes necessary to excavate into the underlying rock formation to excavate the pipeline trench to bury the pipeline.

The proposed 4-inch line for RGU 22-6-298 well preferred alternative may impact scientifically important fossil resources should excavations into the alluvium prove that the covering soils are so shallow that the underlying rock formation is impacted by excavations of the pipeline trench.

The proposed 4-inch line for RGU 32-17-298 well is located in what appears to be the alluvial bottom of Ryan Gulch and should not impact fossil resources unless the soils are very shallow and rock is impacted during excavation of the pipeline trench, in which case scientifically important fossils might be impacted.

The proposed 4-inch line for RGU 31-8-398 well is located mostly in the alluvial bottom of Yankee Gulch and Black Sulphur Creek until it ascends the ridge in Section 28, T 2 S, R 98 W, where it enters the Uinta Formation. There is little likelihood of impacting fossil resources in the alluvial bottoms unless the soils are very shallow and the underlying rock is excavated to construct the pipeline trench. On the ridge above Black Sulphur Creek there is a potential to impact scientifically important fossils as the trench is excavated into the underlying rock formation.

*Environmental Consequences of the No Action Alternative:* There would be no new impacts to fossil resources under the No Action Alternative.

*Mitigation:* 1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing paleontological sites, or for collecting fossils. If fossil materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate

area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear to be of noteworthy scientific interest
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not feasible)

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. A paleontological monitor shall be present prior to the initiation of any pipeline trenching and shall monitor all trenching. The monitor's decisions to not monitor any or all portions of the trench must be communicated in writing, e-mail is acceptable, to the WRFO with justifications for not monitoring.

## **RANGELAND MANAGEMENT**

*Affected Environment:* The proposed action occurs within the Square S (06027), Black Sulphur (06029), Reagle (06026) and Yellow Creek (06030) allotments. The Square S allotment has two grazing permit holders, Mantle Ranches and Boone Vaughn. Both permit holders run cattle on the allotment from May through January. The area of the proposed action is used primarily during May and early June on alternate years with some late fall use in other years. The project lies within three pastures of the allotment which are used in a deferred rotation grazing system. About 2 miles of the pipeline from well 31-8-298 lies within the Black Sulphur Grazing Allotment which has the same permit holders as the Square S allotment. Cattle run on this allotment in spring and fall. The line to well 31-20-298 crosses the Reagle allotment. The permit holders for this allotment, Larry Mautz and Dean Mantle, run cattle on the allotment from May through December. The area of the proposal is used in May and early June on alternating years.

Rangeland Improvements: The proposed pipeline crosses several fences that are either pasture fences, boundary fences between grazing allotments or boundary fences between private and public land. The line from 22-6-298 which parallels RBC Rd. 91 will be on or adjacent to the CDOW fence in Sec 31 and 32.

The proposed pipeline for 31-2-298 essentially parallels the Ryan Gulch pipeline system.

*Environmental Consequences of the Proposed Action:* The proposed action will result in a direct loss of forage to the four livestock operations on the affected allotments until the pipeline routes are successfully revegetated. The loss will be as follows:

Black Sulphur	15 AUMS
Square S	5 AUMS
Reagles	1 AUM
Yellow Creek	1 AUM

This proposed action could interfere with proper functioning of the range improvements near the proposal. The fences and water sources in this area are necessary for control of cattle to achieve grazing objectives on four grazing allotments and to keep cattle from straying into the wrong grazing use area. Damage to fences or gates left open interfere with control of cattle and ultimately with proper utilization of the rangeland resource. Damage to watering facilities could affect water availability and distribution of livestock, resulting in increased grazing pressure on areas that have water available for livestock.

*Environmental Consequences of the No Action Alternative:* There would be no change from the present situation.

*Mitigation:* Any fence crossing and gates encountered on existing roads on public land that are utilized in construction of the pipeline would require placement of a temporary cattleguard constructed to BLM specifications to keep cattle from straying into other areas.

Construction of the line would involve at least three fence crossings that are on or border public land. Proper fence bracing and construction (to BLM standards) must be in place when going through a fence so as to maintain proper wire tensions. The effectiveness (control of cattle) of these fences at these crossing points must be maintained at all times during construction and operation of the pipeline.

The waterline drains and watering troughs located along the proposed route from 31-2-298 will be avoided during construction or replaced in functioning condition if avoidance is not possible. In order to maintain functionality of the waterline, the gas line should be no closer than 25 feet to the waterline. If livestock are present during construction and the waterline and watering troughs are in use, the operator will be required to haul water for livestock for as long as the waterline is not functional. When Bargath crosses this waterline, the BLM Rangeland Management Specialist will be present to monitor /assess damage to the line from construction. Bargath will notify BLM at least a day in advance of this construction.

## RECREATION

*Affected Environment:* The proposed action occurs within the White River Extensive Recreation Management Area (ERMA). BLM custodially manages the ERMA to provide for unstructured recreation activities such as hunting, dispersed camping, hiking, horseback riding, wildlife viewing and off-highway vehicle use.

The project areas area has been delineated/most resembles a Recreation Opportunity Spectrum (ROS) class of Semi-Primitive Motorized (SPM). SPM physical and social recreation setting is typically characterized by a natural appearing environment with few administrative controls, low

interaction between users but evidence of other users may be present. SPM recreation experience is characterized by a high probability of isolation from the sights and sounds of humans that offers an environment that offers challenge and risk.

The project area has been delineated/most resembles a Recreation Opportunity Spectrum (ROS) class of Roaded Natural (RN). RN physical and social recreation setting may have modifications which range from being easily noticed to strongly dominant to observers within the area. However, from sensitive travel routes and use areas these alterations would remain unnoticed or visually subordinate. There is strong evidence of designed roads and/or highways. Structures are generally scattered, remaining visually subordinate or unnoticed to the sensitive travel route observer. Structures may include utility corridors, microwave installations and so on. Frequency of contact is moderate to high on roads and low to moderate on trails and away from roads. RN recreation experience is characterized by a moderate probability of isolation from the sights and sounds of humans that offers an environment that offers challenge and risk.

*Environmental Consequences of the Proposed Action:* If construction coincides with hunting seasons (September through November) it will most likely disrupt the experience sought by those recreationists.

With the introduction of new well pads and roads, an increase of traffic could be expected increasing the likelihood of human interactions, the sights and sounds associated with the human environment and a less naturally appearing environment.

*Environmental Consequences of the No Action Alternative:* No loss of dispersed recreation potential and no impact to hunting recreationists.

*Mitigation:* None.

## **VISUAL RESOURCES**

*Affected Environment:* The proposed actions would be located in an area with a Visual resource Management (VRM) III classification. The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

*Environmental Consequences of the Proposed Action:* The proposed actions would increase the width of existing linear disturbance associated with existing roads. After the pipelines are installed, the surface seeded, and vegetation is established, the increased width of the linear disturbance would be visible to the casual observer. The proposed actions may attract attention, but would not dominate the view, since the disturbance would repeat the features of the existing disturbance. The level of change to the characteristic landscape would be moderate and the standards of the VRM III classification would be retained.

*Environmental Consequences of the No Action Alternative:* There would be no additional impacts.

*Mitigation:* None

## **WILD HORSES**

*Affected Environment:* A portion of the proposed action is located in the Duck Creek vicinity of the Piceance-East Douglas wild horse herd management area (HMA). Duck Creek supports a resident population of wild horses.

*Environmental Consequences of the Proposed Action:* Horse bands may be displaced during the pipeline construction. The displacement is expected to be minimal and temporary in nature.

*Environmental Consequences of the No Action Alternative:* None.

*Mitigation:* None.

**CUMULATIVE IMPACTS SUMMARY:** This action is consistent with the scope of impacts addressed in the White River ROD/RMP. The cumulative impacts of these activities are addressed in the White River ROD/RMP for each resource value that would be affected by the proposed action.

Exhaust produced from heavy equipment associated with the proposed actions combined with the increasing number of fluid mining activities in the Piceance Creek basin will have cumulative impacts detrimental to local air quality.

## **REFERENCES CITED:**

Conner, Carl E.

2005a Class III Cultural Resources Inventory for Ten Proposed RGU Well Locations and Short Access Routes in Rio Blanco County for Williams Production RMT [Fed RGU Well Nos.: 23-6-297, 13-36-198, 24-29-198, 31-30-198, 31-32-1998, 33-32-198, 22-35-198, 44-1-298, 12-10-298D, 42-11-298]. Grand River Institute, Grand Junction, Colorado

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Conner, Carl E, Curtis Martin, Barbara Davenport and Nicole Darnell

2004 A Class III Cultural Resources Inventory for Eight proposed Well Locations and Related Accesses in Rio Blanco and Garfield Counties, Colorado for Williams Production RMT Company. Grand River Institute, Grand Junction, Colorado

2005 A Class III Cultural Resources Inventory for the Proposed RGU #34-19-198 Well Location and Related Access in Rio Blanco County, Colorado for Williams Production RMT Company. Grand River Institute, Grand Junction, Colorado.

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2004 A Class III Cultural Resources inventory for the Proposed Ryan Gulch Gathering System and Compressor Station in Rio Blanco County, Colorado for Williams Production RMT Company. Grand River Institute, Grand Junction, Colorado.

Conner, Carl E., Barbara Davenport, Dana Archuleta and Jim Conner

2005 Class III Cultural Resources Inventory Report for Seven proposed pipeline ROWs in Rio Blanco County, Colorado for Bargath Inc. Grand River Institute, Grand Junction, Colorado.

Tweto, Ogden

1979 Geologic map of Colorado. United States Geologic Survey, Department of the Interior, Reston, Virginia.

**PERSONS / AGENCIES CONSULTED:** None

**INTERDISCIPLINARY REVIEW:**

<b>Name</b>	<b>Title</b>	<b>Area of Responsibility</b>
Nate Dieterich	Hydrologist	Air Quality
Tamara Meagley	Natural Resource Specialist	Areas of Critical Environmental Concern
Tamara Meagley	Natural Resource Specialist	Threatened and Endangered Plant Species
Michael Selle	Archeologist	Cultural Resources Paleontological Resources
Mark Hafkenschiel	Rangeland Management Specialist	Invasive, Non-Native Species
Brett Smithers	Wildlife Biologist-NRS	Migratory Birds
Brett Smithers	Wildlife Biologist-NRS	Threatened, Endangered and Sensitive Animal Species, Wildlife
Bo Brown	Hazmat Collateral	Wastes, Hazardous or Solid
Nate Dieterich	Hydrologist	Water Quality, Surface and Ground Hydrology and Water Rights
Brett Smithers	Wildlife Biologist-NRS	Wetlands and Riparian Zones
Chris Ham	Outdoor Recreation Planner	Wilderness
Nate Dieterich	Hydrologist	Soils
Mark Hafkenschiel	Rangeland Management Specialist	Vegetation
Brett Smithers	Wildlife Biologist-NRS	Wildlife Terrestrial and Aquatic
Chris Ham	Outdoor Recreation Planner	Access and Transportation
Ken Holsinger	Natural Resource Specialist	Fire Management
Robert Fowler	Forester	Forest Management
Paul Daggett	Mining Engineer	Geology and Minerals
Mark Hafkenschiel	Rangeland Management Specialist	Rangeland Management
Penny Brown	Realty Specialist	Realty Authorizations
Chris Ham	Outdoor Recreation Planner	Recreation
Keith Whitaker	Natural Resource Specialist	Visual Resources
Valerie Dobrich	Natural Resource Specialist	Wild Horses

## **Finding of No Significant Impact/Decision Record (FONSI/DR)**

**CO-110-2005-172-EA**

**FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE:** The environmental assessment and analyzing the environmental effects of the proposed action have been reviewed. The approved mitigation measures (listed below) result in a Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

**DECISION/RATIONALE:** It is my decision to approve the construction, operation, and maintenance of the gathering pipelines for gas and produced water from the Ryan Gulch Unit wells as described in the proposed action, with the mitigation measures listed below. This development, with mitigation, is consistent with the decisions in the White River ROD/RMP, and environmental impacts will be minimal.

### **MITIGATION MEASURES:**

1. The operator will be responsible for complying with all local, state, and federal air quality regulations as well as providing documentation to the BLM that they have done so. Stockpiled soils associated with pipeline construction will be wetted to mitigate fugitive dust production.
2. For all of the pipelines in the proposed action the following mitigation will apply: The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:
  - whether the materials appear eligible for the National Register of Historic Places
  - the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
  - a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines

for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

3. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

4. In addition the following mitigation will apply to each individual pipeline/well pad:  
The proposed 4-inch line for RGU 31-2-298 well: The pipeline shall be rerouted to the center line of the access road in the vicinity of 5RB 2500. The site boundaries shall be flagged for avoidance and the trench in the vicinity of the site shall be monitored.

For the proposed 4-inch line for RGU 22-6-298, down Rio Blanco County Road 91, the Colorado Division of Wildlife (property owner) has stipulated that the pipeline will be laid north of the county road avoiding site 5RB 646.

For the proposed 4-inch line for RGU 43-15-298 well: All pipeline construction activities must remain south of the existing access road in the vicinity of 5RB 2170.

For the proposed 4-inch line for RGU 31-20-298 well: Appropriate mitigation was identified in the earlier EA (CO-110-04-180) for that segment of the pipeline in the vicinity of site 5RB 2684.

For the proposed 4-inch line for RGU 31-8-398 well: Site 5RB 5023 must be avoided by all construction and maintenance activities related to the well tie.

6. If the RGU 31-8-398 pipeline is buried at T2S, R98W, sec. 28 NWSE where the pipeline comes down near the toe of slope, the topsoil containing the light colored shale outcropping should be set aside and then replaced in the same place when the groundwork is completed.

7. The applicant shall be required to collect and properly dispose of any solid wastes generated by the proposed actions.

8. No operations using chemical processes or other pollutants in their activities will be allowed to occur within 200 feet of any water bodies. The operator will be responsible for complying with all local, state, and federal water quality regulations.

9. All surface disturbing activities must strictly adhere to “Gold Book” surface operating standards for oil and gas exploration and development. This book is available at the WRFO upon request.

10. Portions of the proposed pipelines which will cross drainages shall be designed so they will not cause siltation or the accumulation of debris in the drainage crossing.

11. Complete reclamation will follow pipeline construction. Pipelines will be recontoured, 100% of disturbed surfaces will be revegetated with Native Seed Mix #3, flow deflectors and sediment traps (woody debris) will be evenly redistributed over all disturbed seeded areas.

12. On the pipeline route identified above, fragile soils encountered will have the controlled surface use stipulations (CSU) applied. This stipulation is as follows: Surface disturbing activities will be allowed in these areas only after an engineered construction /reclamation plan is submitted by the operator and approved by the Area Manager. The following items must be addressed in the plan: 1) How soil productivity will be restored; 2) How surface runoff will be treated to avoid accelerated erosion such as riling, gulying, piping, and mass wasting. This stipulation would be waived if the operator were to do a surface line.

13. Promptly revegetate all disturbed areas not necessary for production with Native Seed mix #3. Revegetation will commence immediately after construction and will not be delayed until the following fall. Debris will not be scattered on the pipeline until after seeding operations are completed. Seed mixture rates are Pure Live Seed (PLS) pounds per acre. Drill seeding is the preferred method of application.

Native Seed mix #3			
3	Western wheatgrass (Rosanna)	2	Gravelly 10"-14", Pinyon/Juniper Woodland, Stony Foothills, 147 (Mountain Mahogany)
	Bluebunch wheatgrass ( Whitmar)	2	
	Needle and thread	1	
	Indian ricegrass (Rimrock)	2	
	Fourwing saltbush (Wytana)	1	
	Utah sweetvetch	1	

14. If construction/development occurs between April 15 and November 15, the operator will be required to water surface access roads to reduce airborne dust and damage to roadside vegetation communities

15. It is recommended that, regardless of prevailing winter weather conditions, construction of the pipeline right-of-way for locations 31-2-298 and 31-20-298 be scheduled to avoid the period between January 1 and April 15.

16. Suitable raptor nesting habitat that occurs within the proposed pipeline right-of-ways will be surveyed for nest structures. The BLM will provide a map of potential raptor nesting habitat associated with the proposed pipeline right-of-ways. All suitable raptor nesting habitat associated with the proposed pipeline right-of-ways will be surveyed using established inventory methods. A written report of findings will be submitted to the BLM WRFO seven days prior to the anticipated start date of surface disturbance activities.

17. If active nests are found in close proximity to the proposed pipeline right-of-way, then these sections of pipeline would be subject to the RMP-approved timing limitation stipulation TL-04, which disallows disruptive activity within ¼ mile of raptor nests from February 1 through August 15 or until fledging and dispersal of young. This stipulation can be modified based on site-specific information that indicates the nest would remain unattended by May 15 of the project year.

18. Several options may be considered for treatment of slash from this project. A hydro-ax or other mulching type machine could be used to remove the trees. The machines are capable of shredding trees up to 12" in diameter and 15' tall as well as mowing brush like a conventional brush beater. It generally leaves small branches and pieces of wood from pencil size up to

bowling ball size. The mulch is evenly scattered across the surface and the tires or tracks distribute the weight of the equipment; this would effectively breakdown the woody fuel and scatter the debris thereby eliminating any hazardous fuel load along the road and pipeline right-of-way. The other option would be to cut trees and have them chipped and scattered on the right-of-way after seeding of the disturbed areas.

19. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing paleontological sites, or for collecting fossils. If fossil materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO).

Within five working days the AO will inform the operator as to:

- whether the materials appear to be of noteworthy scientific interest
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not feasible)

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

20. A paleontological monitor shall be present prior to the initiation of any pipeline trenching and shall monitor all trenching. The monitor's decisions to not monitor any or all portions of the trench must be communicated in writing, e-mail is acceptable, to the WRFO with justifications for not monitoring.

21. Any fence crossing and gates encountered on existing roads on public land that are utilized in construction of the pipeline would require placement of a temporary cattleguard constructed to BLM specifications to keep cattle from straying into other areas.

22. Construction of the line would involve at least three fence crossings that are on or border public land. Proper fence bracing and construction (to BLM standards) must be in place when going through a fence so as to maintain proper wire tensions. The effectiveness (control of cattle) of these fences at these crossing points must be maintained at all times during construction and operation of the pipeline.

23. The waterline drains and watering troughs located along the proposed route from 31-2-298 will be avoided during construction or replaced in functioning condition if avoidance is not possible. In order to maintain functionality of the waterline, the gas line should be no closer than 25 feet to the waterline. If livestock are present during construction and the waterline and watering troughs are in use, the operator will be required to haul water for livestock for as long as the waterline is not functional. When Bargath crosses this waterline, the BLM Rangeland



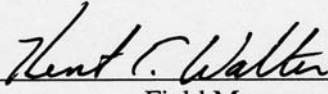
Management Specialist will be present to monitor /assess damage to the line from construction. Bargath will notify BLM at least a day in advance of this construction.

24. The holder will install a surface segment for the pipeline route to the RGU 31-8-398 where it leaves County Road 85 and follows an existing two-track down an extremely steep slope with fragile soils in T. 2 S., R. 98 W., sec. 28.

**COMPLIANCE/MONITORING:** Compliance will be conducted by the realty staff every five years.

**NAME OF PREPARER:** Penny Brown

**NAME OF ENVIRONMENTAL COORDINATOR:** Caroline Hollowed

**SIGNATURE OF AUTHORIZED OFFICIAL:**   
Field Manager

**DATE SIGNED:** 09-09-05

**ATTACHMENTS:** Location map of the proposed action.

# Location of Proposed Action CO-110-2005-172-EA

